

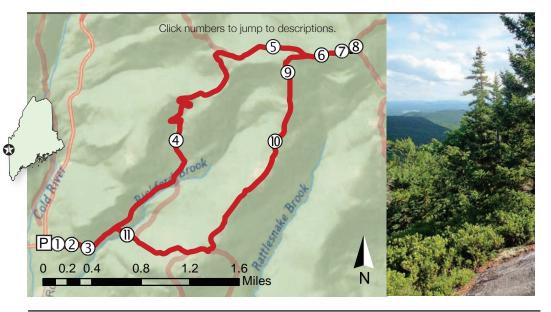
Speckled Mountain

Bickford Brook and Blueberry Ridge Trails – 8.2-mile loop, strenuous

On the flanks and summit of Speckled Mountain, human and natural history mingle. An old farm road meets a fire tower access path to lead you through a menagerie of plants, animals, and natural communities. On the way down Blueberry Ridge, with a sea of blueberry bushes at your feet and spectacular views around every bend, the rewards of the summit seem endless.

Getting There

From US Route 2 in Gilead, travel south on Maine State Route 113 for 10 miles to the parking area at Brickett Place on the east side of the road. From US Route 302 in Fryeburg, travel north on Maine State Route 113 for 19 miles to Brickett Place.



① **A House of Many Names** -71.003608, 44.267292 Begin your hike at Brickett Place Farm. ▲ to map



Brickett Place farmhouse Image courtesy of White Mountains Interpretive Association

In the 1830s, a century before present-day Route 113 sliced through Evans Notch, John Brickett and Catherine (Whitaker) Brickett built this farmhouse from homemade bricks. Here, they raised nine children alongside sheep, pigs, cattle, and chickens. Since its acquisition by the White Mountain National Forest in 1918, Brickett Place Farmhouse has served as Civilian Conservation Corps headquarters (1930s), Cold River Ranger Station (1940s), an Appalachian Mountain Club Hut (1950s), and a Boy Scouts of America camp (1960-1993).

Today, Brickett Place Farmhouse has gone through a thorough restoration and remains the oldest structure in the eastern region of the Forest Service. On Saturdays and Sundays, you can duck inside the building for a history of the local area and the Brickett Family, or for hiking and camping information. For the first quarter mile of the hike, look for rough stone walls running through the surrounding forest that were used to separate the farm animals from the potatoes, corn, and hay that the Bricketts grew.

② Northern Hardwoods Forest A Northern Hardwoods Forest surrounds the trail near the trailhead. \land to map

Paper birch, easy to identify with its white, peeling bark, is reaching maturity here;



Paper birch bark



Canada mayflower (left), starflower (right)



Smooth bark of a healthy beech tree



Stand of diseased beeches

some of these trees have already snapped and lay in a zigzag pattern across the forest floor. As an early-successional tree, paper birch is among the first species to germinate on bare soil after a disturbance like logging or fire. The presence of paper birch here provides evidence that this forest is re-growing from an open condition in the last 40-50 years.

American beech, yellow birch, and sugar maple mingle with the paper birch. These tree species are characteristic of the Northern Hardwoods Forest that this stand is slowly maturing into. As you progress up the trail, look for red oak, eastern hemlock, white ash, and hophornbeam. Herbs typical of a Northern Hardwoods Forest found here include Canada mayflower, bluebead lily, and starflower.

As you head up the trail, you may hear the high-pitched alarm calls of eastern chipmunks, a common resident of this forest type. With beechnuts and acorns available for food, these charismatic, striped members of the squirrel family are at home in the nooks and crannies of these old stone walls.

A Destructive Duo -70.999744, 44.267022
0.2 miles after Brickett Place, keep right as the trail connects with the Bickford Jeep Trail, an old fire tower access road.

🙏 to map

Along the first stretch of the Bickford Jeep Trail, look for healthy American beech, recognizable by its smooth, light-gray bark and very regularly toothed oval-shaped leaves. The bark keeps the tree from overheating by reflecting sunlight, discourages other organisms from growing on it, and most impressively, allows light to pass through so that the tree can photosynthesize. As you round the first bend to the left, healthy beech bark is replaced with bark that is cracked and pock-marked. In this form, it is much more difficult to identify these trees as beech.

A scale insect and fungus collectively cause beech bark disease, which is wide spread in Maine and the rest of New England. Despite its benefits, the beech's thin bark offers no defense against the beech scale, a tiny insect introduced from Europe in the late 1800s. And still worse, while burrowing into the bark to feed, the insect infects the tree with a destructive fungus. The tree tries to isolate the fungus in ugly cankers, but fails. These openings in the bark make the beech tree more susceptible to infestation from insects, and subsequently woodpeckers. Too many holes and disruptions in the bark prevent the movement of life-supporting nutrients and the tree gradually weakens and dies. The decline of beech affects many species, like bears, that depend on beechnuts for survival.

Keep left at the next fork, following the Bickford Brook Trail uphill. The trail will wrap around the western side of Ames Mountain.

④ Putting the "Ever" in "Evergreen" -70.983189, 44.279477 At 1.6 miles, the Northern Hardwoods Forest transitions into a darker, evergreen forest on the flank of Ames Mountain. ▲ to map

Compare this Lower-elevation Spruce – Fir Forest to the Northern Hardwoods Forest that you just hiked through. How many differences can you find? The soil of the



Red spruce branches



Sheep laurel (left), creeping snowberry (right)



To produce food for the plant, leaves must absorb sunlight and take in carbon dioxide from the air through tiny pores called stomata, through which water also evaporates. Needle-shaped leaves are designed specially to prevent water loss; they have special "pit-like" stomata and are protected by a thicker, waxy cuticle that allows them to shed snow in the winter. The reduced size of needle-shaped leaves prevents them from gathering as much sunlight as broad leaves during the growing season, but needle-leaved trees compensate by keeping their needles year round, and therefore absorbing the sun's energy whenever conditions will allow it.



Yellow birch glade

trail is sandy and stained with red in places, indicating the presence of iron. The trees are shorter compared to the lofty canopy down slope. Red spruce has become much more dominant here while American beech has decreased in abundance. The understory shrubs and herbs have changed to include lowbush blueberry, sheep laurel, creeping snowberry, trailing arbutus, and bracken fern.

Fungi and other microorganisms break down dead material on the forest floor, releasing nutrients into the soil. These decomposers complete their work rapidly in warm, moist climates. In cooler climates, like the upper slopes of Ames Mountain, decomposition is slower and it takes longer to return nutrients to the soil. To help retain nutrients, evergreen trees like spruce and fir keep each needle (a type of leaf) for many years before replacing it. This is one of the adaptations that makes them better suited for the harsher climates found near mountaintops than broadleaved trees like maples

The trail crosses back into the northern hardwoods forest before returning to the conifers on the northwest shoulder of Ames Mountain.

(5) Made in the Glade -70.968044, 44.290843
At 3.3 miles, the Spruce Trail joins the Bickford Brook Trail on the left.
Remain on the Bickford Brook Trail and walk east along the contour to reach a glade of old yellow birch and ferns on the left.

Look for several glades of ferns growing under a handful of large, gnarled yellow birches to the left (downslope) of the trail. Some of these yellow birches have many low branches, suggesting that they grew under conditions of full sun, rather than under a canopy of other trees. Heavy moose browsing is likely keeping the shrubs in check and even preventing other trees from growing tall enough to reach the canopy. The understory is a knee- and waist-high sea of mountain wood fern, hay-scented fern, and interrupted fern above bluebead lily and wild sarsaparilla.

At 3.6 miles, keep left at the junction with the Blueberry Ridge Trail to continue toward the summit of Speckled Mountain.

⑥ A Walk Through Maine's Fire History -70.959806, 44.290015 ^{A to map}
 0.2 miles beyond the intersection with the Blueberry Ridge Trail, the trail passes through a clearing dotted with spruce, maples, and snapped paper birch.

In summer, it feels hot out here after the cool shade of the spruce and fir! You may have noticed the remnants of the old communication system for the Speckled Mountain Fire Tower. Old wire, with occasional white insulators, can be seen hanging from trees along the trail or lying on the ground in some places. Fire watchmen accessed the tower using the same jeep track that you have been walking on until it was closed in the 1970s. In 1987, the tower was moved to Streaked Mountain well to the east, where it still stands.

Today, raspberries and ferns have overtaken this clearing; seeds from the surrounding forest may have difficulty germinating in the shade beneath these plants. Hay-scented fern is especially adept at keeping a clearing... well, clear. Competition for space here in the light can be ruthless, so this species of fern releases chemical toxins into the



Hay-scented fern



Rhodora



Mountain cranberry



The undersides of black huckleberry leaves are covered in shining, resinous glands.

soil that inhibit the growth of other plants, including trees that might shade it out. This adaptation is called allelopathy.

⑦ Roots with a View

Look for fallen trees on the section of trail between the clearing and the summit of Speckled Mountain.

Trail crews have had a steady supply of work clearing fallen trees that block the trail here. Trees near mountain summits are usually growing in shallow soils over bedrock, and are therefore susceptible to strong winds, especially when they are top-heavy with snow. As larger trees fall over, seedlings establish in the new pools of light; these small-scale disturbances lead to the age diversity characteristic of mature forests.

Uprooted, fallen trees are called tip-ups, and their now-aboveground root systems are popular nesting sites for winter wrens. Listen for winter wrens here, their energetic, high-pitched song is exceptional in duration at around eight seconds long.

🛦 to map

A to map

® Nurse Trees -70.955201, 44.290761 At the summit, the trail emerges on bedrock ledges at the former site of the Specked Mountain Fire Tower.

There are seemingly endless views from here including East and West Royce Mountains to the northwest, and Miles Knob to the northeast.

Stunted red spruce, balsam fir, and heart-leaved birch grow in crevices and on flats where the barest of soil has developed in this Rocky Summit Heath natural community. Rhodora and alpine blueberry surround some of these trees, forming a shelter of sorts and creating an island of greenery among the granite ledges. Bearberry and mountain cranberry also grow here but are less common. The spruce and fir here act as "nurse trees," sheltering the smaller plants from the harsh winds that scour this mountaintop.

Retrace your steps to return to the Bickford Brook junction.

The Blueberries of the Blueberry Ridge Trail

🙏 to map

-70.962293, 44.289933 Back at the junction with the Bickford Brook Trail, take the Blueberry Ridge Trail to the left.

You'll be walking in and out of the open patches of Rocky Summit Heath community as you descend on the Blueberry Ridge Trail, but there are three main outcrops that afford great views. From these ledges, you can see the islands in Kezar Lake and the mountains beyond.

These rocky summit areas are surrounded by spruce - fir forest. In places where the trail cuts through the vegetation on the rocky summits, you can feel the loamy, organic soil underfoot. Millennia have yielded only a few inches of soil in the crevices and depressions on these hard, granite summits.



Flag tree



Bracken fern



Wild raisin



Bickford Brook, forced through a narrow channel



When forced to travel through a smaller space (S $_2$), water will move at a higher velocity (V $_2$) Illustration © Kelly Finan, all rights reserved

The granitic bedrock is partly responsible for the development the Rocky Summit Heath community on these ridges. Because granite weathers slowly and does not release many nutrients to the soil, plants growing here must be tolerant of poor conditions. Many of the species growing here can also be found in bogs, where waterlogging and slow organic matter decomposition also limit nutrient availability. In fact, blueberries, huckleberries, and cranberries, all found along the trail, are members of heath plant family (Ericaceae), which is characterized by plants with leathery leaves that are known for their ability to survive in acidic and infertile conditions.

ID Flag Trees -70.977704, 44.266857

▲ to map

▲ to map

At mile 6, the summit of Blueberry Mountain is on the Blueberry Ridge Trail just a few feet beyond the junction with the White Cairn Trail.

As you reach the trail junction near the relatively flat summit of Blueberry Mountain, notice that the spruce is being replaced with white and red pine. Compared to the Rocky Summit Heath community, this Spruce – Pine Woodland is more sheltered and supports taller trees. Other plants typical of a Spruce – Pine Woodland include wildraisin, sheep laurel, bracken fern, and lowbush blueberry.

By looking at the tall pines, can you tell which way the prevailing wind blows? Having broken rank with many of their neighbors, these trees are exposed to strong winds, sometimes carrying snow and ice that can bend and break their branches. The branches on the downwind side of the tree remain, in a phenomenon called "flagging."

The Power of Water -70.990968, 44.268877 At approximately 7 miles, the trail crosses Bickford Brook just before it is reunited with the Bickford Brook Trail.

Just below where the trail crosses Bickford Brook, the stream channel narrows, funneling the water into a narrow shoot. Drop a twig into the water up here and watch as it accelerates through the bends of this waterslide-like chasm in the bedrock.

Imagine putting your thumb over the end of a garden hose; the water that escapes around your thumb is moving much faster than the same stream of water when unimpeded. In other words, the speed of flowing water increases where it is forced into a narrower channel. Moving water is an agent of weathering and erosion, meaning that it breaks down surfaces over which it flows into smaller sediments (weathering) and carries them away (erosion). Faster moving water weathers and erodes rock faster than slower moving water.

The process of weathering and erosion by moving water is very, very slow. Think of the Grand Canyon; it took the Colorado River, sometimes loaded with snow and ice, about six million years to carve it to its current depth of over a mile. Though we may not notice this little chasm getting deeper in our lifetimes, the water in this narrow chute is carving this section of Bickford Brook a tiny bit deeper every year.

Keep left at the final trail junction to return to Brickett Place Farm. To explore and share more of Maine's extraordinary natural features, be sure to check out the other Natural Heritage Hikes covering dozens of trails from the coast to the western mountains.

Naturalist's Glossary

Understory: The layer of vegetation that grows between the ground and the highest tree branches in a forest. **Canopy:** The highest layer of branches in the forest.

Bedrock: The consolidated layer of rock beneath the soil and glacial deposits.

Natural Heritage Hikes is a project of the Maine Natural Areas Program in partnership with the Maine Trail Finder website. For more Natural Heritage Hikes, please visit www.mainetrailfinder.com.

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Designed and written by Nancy Olmstead and Kelly Finan

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